UNITED STATES ENVIRONMENTAL
PROTECTION AGENCY

In the Matter of the Proposed Plan of the

LI TUNGSTEN SUPERFUND SITE
located in

THE CITY OF GLEN COVE, NEW YORK

PUBLIC MEETING in the above-captioned matter, held on the 16th day of August, 1999 at 7:10 p.m., at the City Council Chamber, 9 Glen Street, Glen Cove, New York, pursuant to a Notice of Public Meeting, and before Florence V. Wiles, a stenographer and Notary Public of the State of New York.

B E F O R E :

Cecilia Echols, Community Involvement Coordinator

Doug Garbarini, Chief Eastern New York Remediation Section

Ed Als, Project Manager

Marian Olsen, Risk Assessor

Carl Garvey, Regional Counsel

Jim Doyle, Regional Counsel

MAYOR SUOZZI: Good evening everybody, my name's Tom Suozzi. I'm Mayor of the City of Glen Cove. I would like to welcome you and the EPA here and put into context what this meeting is in relation to: The city's waterfront revitalization.

The City of Glen Cove is about seven square miles. It's home to about 25,000 to 30,000 people. In the City of Glen Cove we have 10 miles of waterfront, of which nine miles, 300 acres, is water preserve, and we have gold coast estates and a lot of public space available for everyone to enjoy.

One mile of our city's waterfront was originally an industrial area of the city that is home to several major environmental problems, two federal Superfund sites, and the one we're discussing tonight, Li Tungsten Corporation site as well as Captain's Cove are New York State fund sites which we have discussed at every meeting prior to tonight.

The city's objective is to try and cleanup this area, recycle and reuse the

properties and put them in productive use once again.

What the waterfront revitalization project is going to be the focus of now is cleaning up the pollution in this area, which is, as I said, home to many environmental problems of which one of the most significant is in Li Tungsten. It's home to radioactive waste, heavy metals, other types of environmental problems that have been there for decades, that finally, after a lot of attention being focused on this area by the City of Glen Cove, by citizens of the city, by environmental groups, Li Tungsten -- in fact our area is one of 16 areas in the nation that is a model for cleaning up sites.

We're very excited that the EPA has finally reached this step in the process that brings us that much closer to cleaning up the mess at Li Tungsten. Our job now is to insure the plan is going to insure our residents in a permanent way may utilize this part of the city.

Again, Glen Cove is a beautiful place,

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along the Glen Cove Creek which really has been important to our city's history, it was once important to all of Long Island going back to the 1600's and the Duryeas. And you know at one time this location was the largest job provider, largest taxpayer, and very important to the local economy, but now we're left dangerous and abandoned properties that don't provide any jobs, don't provide any taxes and are dangerous and polluted. And the waterfront revitalization project is about cleaning up that mess that has been left to us and making sure anything we do in the future will be sustained for generations to come and in harmony with the natural environment. So Li Tungsten cleanup is one of many factors, but one of certainly the major factors in the cleanup of this entire area.

With that, I'm going to turn it over to the EPA who are going to conduct a public hearing about the cleanup of Li Tungsten.

MS. ECHOLS: Good evening. I would like to thank everyone for coming out tonight. We're ready to start our presentation for the

Li Tungsten Superfund Site.

I'm Cecelia Echols. I'm the Community Relations Coordinator for the Li Tungsten Superfund Site, and we're here to discuss the proposed plan of cleanup for the Li Tungsten Facility as well as the Captain's Cove property.

I want to tell you a bit about community relations program that wants the community to be involved in the decision-making process. We look for all your input throughout the cleanup process during the proposed plan, during the remedial investigation feasibility studies, community interviews, construction complete, construction design and so forth.

I hope that everyone has had an opportunity to sign in. I see that some people signed in, but they did not include their mailing address. If you could go back and put your mailing address back on the sheet, I would like to include you on our mailing list. And in the future if any mailings go out, you will be able to receive them.

One of the handouts was the proposed plan, I hope that everyone has received that; another one is the overhead that Ed will be discussing. If you won't be able to see the screen, you'll have them on your lap.

The public comment period started July 28th and it has been extended to September 17th. In our community relations program we do make sure that everyone receives the proposed plan. We mailed out approximately 175. I received many phone calls in the past two and-a-half weeks for people who wanted to receive the proposed plan. I hope if there's anyone in here who called me, I hope you have received it before the meeting.

All of your comments tonight will be a part of our summary that will be prepared in our office, which is a part of the record of decision which is then signed by the regional administrator.

We are seeking your input tonight. If you do not feel comfortable enough to address your question tonight, you can e-mail your comments to Ed, his e-mail address is on the

second page in the handouts. I also have an 800 community relations hotline, the number is 1-800-346-5009, it comes directly into me. If you have any questions or concerns, you can call me directly, and I will try to address them.

On the agenda today is Doug Garbarini, the second to the right of me. He will give an overview of the Superfund process. Then we'll move to Ed Als, he's the project manager. He's been on this site for many, many years. He knows a lot of people out here in this community. If you have any questions or concerns about the presentation tonight, you can call him or I to address any of those concerns, like I said, if you don't want to do them in person. He's going to talk about the site background, the remedial investigation feasibility study and the preferred remedy. We also have Marian Olsen, she's the risk assessor. We have Carl Garvey and Jim Doyle, the EPA's counsel.

After the presentation from Doug and Ed, we open up the questions and answers. We have

a stenographer. If you would, please stand, state your name and spell your last name for the record, we will appreciate it. I'll hand it over to Doug.

MR. GARBARINI: Thank you, Cecelia. I would just like to start out by thanking you all for coming out for tonight's meeting. I'm very pleased to have you here, glad that you can watch the process. I realize there are quite a few of you that have been very active in the community over the last few years and have provided EPA with a lot of input, which we have found very valuable, we appreciate that, and we hope that you will continue it right through our remedy selection process as well as through our completion of our construction at the site.

I'm just going to take about 10 minutes to walk you through an overview of the Superfund process, give you a few tidbits of information just so you can get a better feel for the setting in which this meeting tonight is taking place. But as Cecelia said, the focus of the night's meeting is really on the

proposed plan and the remedy process.

Just to step back in time, if you go back to 1980, Congress passed the Comprehensive Environmental Response and Compensation and Liability Act, otherwise known as CERCLA or Superfund. Back in 1980 this decision by Congress came about because of the fact that there were a large number of sites across the country that were coming to national attention as abandoned hazardous waste sites, most notably Love Canal or Valley of the Drums. At that point in time, the federal government did not really have one piece of legislation that would allow us to respond to such emergencies. We had to use a patchwork of various local, state and federal government funding sources, as well as laws to respond to the Love Canal and the Valley of the Drums. So what Superfund did is provide us with a Superfund or pot of money that we could use to respond to long-term studies and cleanups at abandoned hazardous waste sites primarily. Basically, this pot of money is coming from taxes on petroleum and chemical

industries primarily. It's used, as I said, for NPL, or National Priority List sites.

Now you may ask, how does a site become a National Priority List site? It starts out by our pre-remedial investigations. A site is first brought to our attention and discovered by a locality or state and referred to us. We then go through a process of ranking the site. We go out and do a preliminary evaluation to determine the relative threats posed by the site. We basically run through data that we have through a model called the hazard ranking system and it will basically spit out a score for the site. If it scores above a pre-determined value, it is then proposed for the National Priorities List. We go through about a 60-day public comment period and unless something very unusual happens, the site is almost always added as final listing to the NPL, National Priority List site. There are about 1,400 sites across the country that have been or currently are on the NPL. Approximately 100 of those are located in New York State, just to give you a feel for

where we stand.

The other thing that CERCLA did, aside from giving us a pot of money to perform these long-term studies and the cleanups, it also gave us money to perform emergency actions called removal actions, and our removal program has been highly successful for us. We have conducted more than 5,600 removal actions across the country. And, removal actions, unlike remedial actions which generally require a lot of initial studies and then a long-term response action, are generally short in duration, are generally less than a year, are usually a lot cheaper, generally less than a couple million dollars, and they're pretty much used to respond to acute health threats or immediate threats or potential releases. For instance, we might provide residents with an alternative supply of drinking water, or we might relocate residents, or we might do something as simple as contain leaking drums or leaking tanks something along those lines.

There's one other tool which Congress

gave us with Superfund and really it's actually a bag of tools or enforcement tools. These are very important and powerful provisions that allow us to have those parties that are responsible for the contamination at the site, cleanup the site. And we can do this by asking the parties to perform the work on consent, or we can unilaterally order them to perform the work, or we can utilize this Superfund or pot of money and then come back after them to try to recoup our cost for work.

A nifty little provision that's also folded in there is if we ordered those parties to perform the work and they decline to do it, we can actually take them to court and seek three times the cost of the remedy from their failure for them to comply; so this is a powerful tool.

If you look at our settlements throughout the country, we have settlements on the order of about 15 and-a-half billion dollars across the country. The figure in New York State is about a billion dollars.

Seventy percent of our new activities at

sites are being paid for or performed by responsible parties, and where we invest one dollar of EPA's funds on enforcement, we get a return of any seven dollars for each dollar.

One other thing that I'd just like to mention about removal actions, these can be conducted that are either on the NPL or off the NPL, obviously, if you look at the numbers. We screen all of our NPL sites to see if there is a removal action that can be taken. We want to limit the acute threats as soon as possible. In the instance of Li Tungsten, and the instance of about 15 percent of the other sites throughout the country, we have taken removal actions. In fact, we have taken a couple at Li Tungsten. The one that we have recently completed required that the EPA spend more than six million dollars of the federal pot or Superfund monies. Ed will be getting into that in a little more detail in a couple more minutes in his presentation.

Let me get back to the remedial process. The first step is the remedial studies phase. We have what is called the remedial

investigation, where we actually go out and we sample the soil, the groundwater, the air sediments if they happen to be present. We take a look at the data when it comes back, and we try to determine the nature and extent of contamination. What sort of contaminants are we seeing; what levels are they present at; where are they located. We take this information and we try then to look at what sort of populations might be exposed to the contaminants at the site. For instance, people living nearby or people drinking the groundwater at the site, people that happen to be trespassing across the site. We then determine what risks are acceptable and what risks are unacceptable. And when we find unacceptable risks, we then move into something that is called the feasibility study. In that what we try to do is develop alternatives for reducing those risks to the acceptable levels. We developed these alternatives, we compared them to nine evaluations criteria, which Ed will tell you about in a minute, we then document this in a

feasibility study.

The agency, together with New York State DEC takes a look at the feasibility study and says, based on what we're reviewing, we think the best alternative for cleaning up the site is alternative X. We place that in a document called proposed plan, which is the subject of tonight's meeting. We ask the public for their input. We open up a comment period. We hold a public meeting, and we take all of your comments, whether they be verbal or written, we'll go back to the office at the end of the comment period, and we'll prepare a document, which Cecelia mentioned, called a Responsiveness Summary. This responsiveness summary becomes part of a larger document called the Record of Decision.

In the Record of Decision document, we put forward a conceptual remedy for the site. This document is signed by the highest ranking official of the Region II office; it becomes sort of our decision document for the cleanup of the site. We then, in most occasions, offer the responsible parties the opportunity

to perform the design and remedial action at the site. Basically, the remedial design is an engineering phase where we put together the nuts and bolts and figure out exactly how the site is going to be cleaned-up. We then move into the construction phase, you know, where we get the bulldozers onto the site. We actually get our construction, get our treatment units built. If we need to remove soil, we get our bulldozers out there or backhoes, whatever, and take care of our construction phase at the site.

Just because the construction is done, that does not mean that our efforts are over at that point. We then enter the post-construction phase, which can include operation of your treatment systems, long-term monitoring, these sorts of things. But before we can actually get to this critical milestone here, the deletion, we need to achieve all the cleanup goals that we specified in our record of decision.

In a lot of sites throughout the country, although we have may have completed

construction efforts, we may not have achieved our cleanup goal; for instance, some our groundwater remediation sites, we have actually predicted that cleanup goals will not be achieved for 10, 20, 30 years or even longer. So, when you go back and look at the National Priorities List and say well, the agency only has 1,400 sites on the list, but they have only deleted, I think the figure now is 190, it's not necessarily a good representation of all the work that has been done on the site. So we also talk about the construction completions, and we also have a list called the construction completion list. Currently the agency has completed something like construction at about 610 sites throughout the country, something on that order. We're hoping to achieve 650 by the end of this September. So that's a much larger number than the deletion categories. As you can tell, it represents close to 45 percent of the NPL sites where we actually completed construction.

I think that's pretty much all I had to

say at this point. I'll take questions on this after the close of Ed's presentation. For now, I'll turn it over to Ed and the agency's proposed plan for the site.

(Overhead projector presentation.)

MR. ALS: How many people are actually familiar with the Li Tungsten and the Captain's Cove properties? I know some of you are; I recognize your faces. Okay, so I won't spend a lot of time on the aerials.

We're here someplace at City Hall (indicating); this is Glen Cove Creek (indicating); this is north (indicating), and this blue outline is the Li Tungsten facility (indicating), probably not quite sure when this was taken. Certain buildings are still up like the Dice Complex here, that's been down for approximately a year now. East Building, that's been taken out as a result of prior EPA actions at the site.

Again, it's been a manufacturing facility here in Glen Cove since about 1942 involved in manufacturing Li Tungsten products, started during the war and basically

it's been a manufacturing facility here in Glen Cove for approximately 43 years, basically stopped operations around 1985 and has been sitting there fallow for about the last 14 years.

We got involved out there in 1989-1990 for removal action; that was our first removal action out there. In 1991 we actually listed it on the Superfund National Priorities List. We actually proposed it in that year, and since then we have been conducting various investigations and other activities there. Next slide.

This is the black and white of the Captain's Cove facility (indicating). Captain's Cove was added to the Li Tungsten Superfund site as a result of a discovery that some of the oar tailings or wastage from the oars that were used at Li Tungsten for processing were dumped down the road from Li Tungsten. Li Tungsten is up here, and down here (indicating) is this piece of undeveloped property known as Captain's Cove which dumpings took place of this oar material.

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Other dumpings have occurred here in the past too, but the only ones we were interested in were the Li Tungsten connection.

That made two areas on this Captain's Cove what we call the second phase of Li Tungsten facility or Operable Unit 2. Operable Unit 1 is the geographical area of the Li Tungsten facility; Operable Unit 2 is the two areas on Captain's Cove where these tailings were deposited. The two areas, one is here and we refer to that as area A (indicating), and this is area G right behind what was a condo shell, both these shells were probably taken down on Earth Day as anyone who lives in Glen Cove or the surrounding area knows.

Those two are the focus of EPA's Operable Unit 2. However, the focus of what we're doing here tonight is for both plans. Both project schedules started dovetailing in the last part of this fiscal year; so we decided to do one proposed plan for both sites. Next slide.

Doug mentioned some EPA removal actions

that have taken place, and I also mentioned one that occurred back in 1989 the site owner conducted a removal action, what was considered the most acute health threats were addressed during that action by the Glen Cove Development Corporation.

Right on the heels of that we conducted our investigation to see if that site truly merited placement on the National Priorities List in conduct that it did, so we proposed it in 1991.

We then conducted another removal action in 1996 through 1998. We took almost two years in which we addressed 271 storage tanks, indoors, outdoors we basically extricated them from inside buildings, cut them open, decommissioned them, decontaminated them, got them off the site. That's Li Tungsten, Operable Unit 1, OU1 is shorthand. Captain's Cove is a little bit of a different story. Like I said, it's pretty much an undeveloped piece of property until the mid '80s a condo development tried to get started there. There were obviously environmental problems for

building the residential development there, there were also problems with funding, and I guess the two together, basically, the condo development went south. It didn't take off.

In the late '80s, the DEC ordered the site owner, which was called Village Green Realty, it was a subsidiary of a bank in Maryland, just like the Glen Cove Development Corporation was, to do a gamma radiation survey and to try to determine the extent of any dumping of radioactive residuals there.

We then linked the areas of radioactive residuals in around 1985 to the Li Tungsten site and thereby expanded our investigation. The DEC did a follow-up gamma survey with more sophisticated equipment in 1996, and then the DEC conducted a full-blown RI/FS, utilizing the city because the city was a prior owner of that property. So the DEC ordered our RI/FS, Remedial Investigation Facility Study, which just ended this March in a record decision for that state Superfund portion of the site.

Their mandate was to address chemical contamination. Our mandate at Captain's Cove

is to address the radioactive problems. The reason for that split, if you're interested, is under the state's Superfund law, they are not -- I think the reasoning is that radioactive materials are not considered a hazardous substance under their laws, so they are precluded from spending their money on cleanup on radioactive materials. This is where we're filling that gap.

Elsewhere on that creek there are other Superfund sites. There's a Mattiace site that's a federal Superfund site, that's on an east/west midpoint that lies between Captain's Cove and Li Tungsten, that's also a defunct chemical blending facility, which is a little bit further along in the process of Superfund cleanup. There's actually quite a bit of cleanup that's been done there and treatment plant is actually started up and getting operational between groundwater and soil contamination.

Then there's two other state Superfund sites. One is the old Powers Chemco, which is now an operational facility called Konica. It

was on a state Superfund list as Powers Chemco and before that Columbian Ribbon and Ink, in case anyone's interested in the old names and the history. And directly across the street from the Li Tungsten is an old dry cleaning establishment called Crown Dykeman, it's now an auto body place. That was an old laundromat, another state Superfund site. Next slide.

Okay. The focus of tonight's public meeting is the field investigations for the remedial side of things that you heard Doug talk about at Captain's Cove and Li Tungsten, both operable units.

We did surface and subsurface investigations, and after doing these investigations we did a site characterization, nature and extent of site contamination sort of thing. As an example more or less as a list of the sort of techniques and methodologies that we used to try to figure out exactly what got into the environment, we use things called geophysics, soil gas, surface soil samples, and surface water and

sediment samples. We also sampled the oil residuals that were lying about the Li Tungsten site. Next one.

Those are surface investigations. Beneath the surface we actually do intrusive work like test fittings, source area borings, all different types of borings, borings to see if the storm sewers were leaking, borings to put gamma logs down, find out if there is stuff that's buried subsurface that's radioactive. So you may not have noticed, but we have two poster boards over here, and at some point during the evening, you may want to take a look at the various locations that we have placed some of these -- I guess there's everything up there, not just the intrusive but the surface soils, virtually everything that I just reeled-off is on these.

If they were actually the actual size of these documents, the sites would look like swiss cheese. They're actually a lot smaller than that, there are quite a number of them. I think it was extensively studied based on my experience in this program.

I actually jumped the gun there, we had groundwater investigations too where we evaluated a lot of the existing wells from prior investigations to see if they were useable, if they were, we used them in our codery of wells. We installed new wells where we thought they were needed, and we performed three rounds of groundwater sampling.

Results of the RI/FS and again, this terminology we were calling the Captain's Cove a focus feasibility study, so that's where that comes from, the remedial investigation that was done that was part of Li Tungsten and the focus feasibility study which was really the field work of Captain's Cove, a nuance of the program which is not that important. But anyway, as general results I mean we collected a tremendous load of data, but these are some general statements that I think we can make. Soil contamination categories like PIH's and PCBs, inorganics, heavy metals, radionuclides in general were collocated, that means found in the same place relatively in the same place; that's not always the case,

but to a large extent that was the case.

The radionuclides of concern which was a couple of isotopes of radium, a couple of isotopes of thorium and uranium 238. They were generally not migrated from the original deposition areas. The radionuclides tend to be sufficiently located at Li Tungsten in the first four feet. At Captain's Cove they range up to a greater depth because they tended to be buried over there, lay down, spread out, buried, piled up on top of, so you might actually go down 12 feet in say area G and find this stuff, 12 to 14 feet. Next slide.

That's for soil, now groundwater the findings: There were groundwater volatile organic compounds, VOC plumes, those are your dry cleaning fluids, TCE, and PCE were found on parcels A and C from off-site sources. Actually, two plumes, Crown Dykeman and Mattiace, localized inorganic contamination was primarily on the southend of parcel C, that was as a result of Li Tungsten activities and there was no significant radionuclide contamination in groundwater.

I guess this is a follow-up, this is a sort of follow-up to the groundwater slide. This is Glen Cove's municipal water supply water well locations. Any black dot is an inactive well. These are not active (indicating). The active ones now are this, this and this (indicating). Here's our active one (indicating), and the majority of wells, and also screened in a Lloyd aquifer what we're talking about is the upper glacial at Li Tungsten being affected in a localized manner. Next one.

Okay. Now after we have our sampling results and we've crunched the data, and we have it all tabulated, we do something called risk assessment, that's one of the tools we have to try to determine what the numbers mean, if they pose a threat to human health and environment. We also look at standards that are in existence, but mostly from the soil side of things we're looking at risk assessment to a large extent.

Anyway, what you do in a risk assessment is you use a certain methodology depending on

what you're dealing with. If you're dealing with -- on this particular site if you're dealing with radionuclides or chemicals, you use different methodologies for dealing with both of those; you then determine on this particular site what your exposure pathways might be; in other words, is there you know, public access to the site; is it something where, you know, people, kids play on it, or maybe like in Love Canal where you build your house on it. Something like that where you could have exposures like thermal absorptions or ingestions. Those are exposure pathways.

Then you try to determine potentially exposed populations, again some examples from this: Site trespassers, future site workers. Again, you do a current and future scenario, current scenarios are off-site residents, no one's living on that site, so there are no present residents, but in the future you can say there might be future residents, let's do a future residential scenario where we try to determine where, you know, they would be impacted by what's there at the site; again,

assuming no action was taken which we call a baseline risk assessment. Potentially exposed populations, children we evaluated, we evaluated future site workers. We actually did quite a number of scenarios here. Then we developed the risk estimates, which are actually numerical values, which we think of conservatively developed to overestimate the risk to be on the safe side. Next.

Gee, I jumped the gun on this. These are some of the potentially exposed populations which we just discussed.

Now, for cancer risk EPA looks at this sort of -- This is how EPA evaluates cancer risk. Usually, I'm not sure if people are familiar with 10 to the -4 and 10 to the -6 terminology. Essentially it means one case of extra cancer incidence in a million, that equals 10 to the -6 or one in one million risk; 10 to the -4 risk is the other end of the risk assessment range and that's one in 10,000 or 10 to the -4. Within that range we evaluate the need for action, sometimes we will do, sometimes we don't, it all depends on

other site factors that may influence our decisions. Below the one in a million or the 10 to the -6, we don't take any action. We think one in a million extra cancer incidence is a safe number. Again, we don't like to draw right lines in a number, but that generally is the number that we use.

Above that, if it's greater than 10 to the -4, there will be remediation evaluated, and we consider it justified above that, if the risks are posed that are greater than that on cancer. Next one.

On this particular site too, we have contaminants that pose noncancer hazards. There are other impacts from these sites that are not carcinogenic impacts, you know, systemic effects that aren't cancer but still not good for you. This is evaluated a little bit of a different way. If there's a hazard quotient here, sometimes you see it as hazard index. Hazard indices are typically something that catches your attention and you think that the site maybe posing something in terms of a problem you might have to address, below that

we consider it to be safe. Below one. Next.

For this site, just a quick summary of certain collected selected pathways and populations, actually not pathways, but populations, current off-site residents in terms of cancer risks, the numbers are acceptable. Again, using that 10 to the -4 and 10 to the -6 as our benchmark for acceptability. Unacceptable trespassers in area B and C, B and C on Li Tungsten, and I'm just realizing that I didn't go over that.

Could we go back to the very first slide because I don't think I pointed out A, B and C.? Yeah, parcel A was the one with the buildings that have come down that was the most highly developed portion of the Li Tungsten facility. Parcel B was this undeveloped parcel used for dumping here (indicating), and this was a parking lot again undeveloped (indicating). Parcel C was sort of like this (indicating), and, again, waste treatment here 500 gallon waste storage tank here (indicating), warehouse there and a

reduction of furnace building here, and this was all underdeveloped woods that was added later. I think Glen Cove Development Corporation bought that sometime late '70s or something like that, but again we're calling this all parcel C, again, B, A, C (indicating).

So with that in mind, if you trespass in area B and C, that's going to create an unacceptable cancer risk if you do it over the lifetime of a teenager, that's how the risk is developed, teenager being 10 years. If you do that for 10 years, you will have a calculated cancer risk that we consider unacceptable. That means that you might have an additional risk of contracting a cancer of maybe one in 10,000 or somewhere in that range of possibility. Future residents whether on Captain's Cove or Li Tungsten unacceptable. Future site workers at Li Tungsten, unacceptable. Next.

Summary of noncancer hazard, unacceptable. Well, I'll just read them off current off-site residents, trespassers in

area B and C, future resident, future site workers at Li Tungsten or future construction workers at Li Tungsten and future construction workers at Captain's Cove. Again, these are not all the risks, these are just certain selected ones based on certain populations that I know some of you are interested in based on the meetings that we have had out here and what-not. Based on the remedial investigation, the subsequent risk assessment and a lot of considerations that have to go into these kinds of decisions, we came up with a list of five parameters for soil and cleanup levels that we think that once achieved will cleanup this site to a level that's compatible with future occupation by commercial development, and the numbers are arsenic 24 milligrams per kilogram, lead 400 milligrams per kilogram, Thorium-232 is 5 pCi per gram, Radium-226 is 5 pCi per gram and PCBs, 1 milligram per kilogram top two feet and 10 milligrams per kilogram below that.

These are the areas of Li Tungsten that have been primarily identified as a result of

the remedial investigation and subsequent look at the cleanup levels that are going to require addressing those cross-thatched areas which maybe a little clearer on your handouts, if you're still up to us. So there's maybe a dozen areas that are going to have to be dug out, or at least a dozen.

Over at Captain's Cove radionuclide contamination has caused you to earmark those particular areas again. Collectively, we call this area A (indicating), that's area G (indicating), the state's focus has been on this part of the site (indicating), and we're basically bookending them on either end of the site. Next.

After we have developed our cleanup levels, we look at various ways of achieving them, then compare them to each other to see which ones look like the best possible way to go. On this particular site, we looked at both soil and groundwater alternatives. A lot of times we'll break those out to separate phases, but we kept those together here as well. So we have two sets of alternatives.

For soil, we by regulation or by law, I think it's by regulation, we do a no action alternative, which is done as a baseline. Now, some sites we actually do no action, we actually chose that, but we have to do it by law, so it will always be in there. That's called LS1, CS1 that's shorthand for Li Tungsten soil number 1 and Captain's Cove soil number 1. Secondly, the alternative for Li Tungsten and Captain's Cove is excavation for all those cross-thatched areas, obviously you would test to find out what you have, but you would pretty much just dig up those area and dispose of them off-site at appropriate facilities. For the most part, you're probably going to find out that most of the stuff that you dig up in that matter, I would say that more than 50 percent, is going to test over the cleanup numbers for radionuclides, if you don't intend to separate it out.

We will also do selective building demolition depending on the state of the buildings when we get out there. A lot of the

buildings are pretty deteriorated as a result of the abandonment of the facilities. Some of the buildings have already come down, like I mentioned before. Some of the buildings actually get in the way of the remedial action, and in that sense, they may have to be partially or completely dismantled. In any event, we're going to be taking down some of the buildings. Right now we don't have a solid list, but I would say that you're probably going to see parcel A completely down and parcel C, there's two buildings left I'm not sure how they're going to hold up over the next few years.

Institutional controls, basically our cleanup numbers were developed with a commercial scenario in mind, and we don't think that residences should be developed there after our record decision. Next.

Now, we're up to LS 3, CS 3. This introduces the concept of trying to separate out radionuclides because disposal of radionuclides off-site is an expensive proposition, more expensive than disposing of

chemically hazardous materials. In order to try to make this more of an efficient process, we include a separation process, which could be a technology or construction technique. We're being purposely flexible on that because we want to use the best separation approach that the site warrants, and that might actually vary in some areas; certain areas might require one type of approach, and the other parts of the site might require something a little different. But separation has the potential here, we felt, after looking at the RI results we think there is some separation potential that could be achieved here.

Basically what we would do under this alternative then is to dispose of the radionuclides at an off-site facility. We would then stabilize and dispose of what is the chemical bad actor, the nonradioactive but heavy metal contaminated soils that exist both at Captain's Cove and Li Tungsten. We would dispose on of them on Li Tungsten and parcel B in a prepared cell, which would be constructed

in conformance with RECRA Resource Conservation Recovery Act and a line cell with a cap that meets all the hazardous waste specifications that are in RECRA, and also in state law. Again, same building demolition would apply here and institutional controls.

For our last alternative we have the excavation with the separation. In this particular case, everything goes off-site. Radionuclides that have been separated out go to a radionuclide separating facility. The heavy metals go to a what they call a subtitle B or C facility depending on whether they pass or fail hazard waste constituency tests, there would be samples for those. We expect most of them to be going to subtitle B facility, which is the lesser of the two. Again, building demolition and institutional controls.

On the groundwater side of things, our first alternative is the same, no action. We're monitoring out there now and we would continue that monitoring on some, probably like a six-month to an annual basis, just to see how groundwater is developing in terms of

the movement contamination and whatever.

The second alternative is I guess a version of your standard pump and treat -- maybe not standard because you're using intercepted trenches, which is a fancy word for trench drains, those would be booked in the local extraction wells in areas where we think the contamination is a little bit deeper. It would be treated, it would be pumped and treated onto an on-site package unit, and it would be reinjected probably somewhere in the vicinity of parcel B. Next.

The third alternative for groundwater is again the interceptor trenches with flow extraction, again, the only difference here is we would pump whatever we're getting out of the ground up to the Mattiace treatment facility, which is just starting up, and that would be reinjected just north of the facility where the reinjection gallery is now located.

The last alternative for groundwater is the reactive wall, which is an innovative new technology that sort of resembles a slurry wall. Groundwater collects at certain points

at the wall and is chemically treated by a chemical matrix, which basically removes the materials, then the cleansed groundwater flows to the other side of the wall, a fancy fill filter. In certain spots we would do in-well absorption in a couple of high-hit arsenic wells that are in lower parcel C.

Okay. Those are all the alternatives. These are the nine evaluation criteria that we used to evaluate I'll read them: Protection of human health and environment; compliance with our standards or the state standards that we're operating in the State of New York; number three is long term effectiveness and permanence, that's a plus. If it reduces the contaminant toxicity, mobility of volume, short-term effectiveness, whether it's implementable or not -- you might come up with a great idea, but there's no way you're going to get it implemented in real time; how much the thing cost and whether it's acceptable to both the state and community.

With that, the remedy that we've put into the proposed plan that we're seeking

public comment on and that we're proposing tonight is the fourth soil alternative, which is digging out all the cross-thatched area, separating radionuclides from heavy metals where they coexist to the extent possible, then disposing of the radionuclide contaminated material in a place that will take it, and disposing of the heavy metal contamination at a chemical waste handling facility, or subtitle D facility, which again that will be probably much closer to the place that we're thinking of right now for the radionuclides. The one that I guess people know about is the Envirocare, but that doesn't necessarily have to be the one that gets this, but at the time we seek to dispose of this stuff, if that's the best price and the best operation going then that's who's going to take it. In other words, you know, we're open to whoever is in the business to take this.

We're going to be taking down buildings. I think in the proposed plan we pretty much say everything on parcel A will come down as a result of the structural instabilities that

exist in these buildings. They're getting more dangerous by the week in terms of people that are walking around out there, which hopefully nobody is out there right now, but when we go out there to work, people will not want to be near them.

Institutional controls, as a result we want to see both of these properties, both Li Tungsten and Captain's Cove being used not for residential development but for commercial future uses, and I think the State of New York is also requiring the same thing as their record of decision stated in March of 1999 for the Captains's Cove portion of this; so I think -- actually we'll have to further investigate that -- but I think that particular property will not require additional actions from us because it's already being in place by the state.

For groundwater, we are choosing no action, will continue monitoring because we feel that the cleanup of materials that are causing the groundwater problem as far as the heavy metals, again, the heavy metal

contaminations, groundwater right now is pretty isolated, localized parcel C, maybe a couple wells on parcel A, but for the most part not what we consider a high level threat.

The groundwater is not used presently for potable water. It's the upper glacial aquifer we're talking about. There's probably 20 feet of raritan clay between that aquifer and the drinking water aquifer below. And the amount of contamination again is fairly localized and should dissipate to the beneficial best use of the aquifer in a quickened accelerated fashion once you take away the source, which is the overlying residuals and other stuff that we're going to be taking out part of LS 4, CS 4.

I guess that's about it. We still have cost. And the cost for the remedy estimated including construction contingencies, design cost and operation and maintenance for the groundwater portion, $28,000,000 and the operation and maintenance is $32,000 a year for a grand total 30-year present worth of $28,764,000, almost $29,000,000. And that

concludes the presentation as far as what the plan is all about. Now I guess we open it up to question and answers.

MS. ECHOLS: If anyone has a question that can come to a mike in the middle of the room or you can stand at your seat and just state your name as loud as possible for the stenographer. We would like to open up the floor for questions.

COUNCILMAN GONZALEZ: My name is Steve Gonzalez. I'm City Councilman of the City of Glen Cove, and I'm a member of the Li Tungsten Task Force. My question on the last time you talked about the cost being approximately $29,000,000; how much funding is available from the EPA for the city in terms of that funding?

MR. ALS: The funding?

COUNCILMAN. GONZALEZ: For that cost, how much is available of the EPA funding for that cost of the cleanup?

MR. GARBARINI: How much EPA funding is available?

COUNCILMAN GONZALEZ: Yes?

MR. GARBARINI: As I said, tried to mention in my presentation, the first thing we would do in most cases and I did plan to actually say something about that. But usually after the record of decision is signed, we go after those parties that are responsible for the contamination and try to get them to fund or perform the cleanup of the remedy. For instance, that's pretty much what we plan to do here, except there is a small portion of the work, Phase 1, which we're trying to see if we can actually get Phase 1 of the work performed in an expedited way. And that phase of the work, if we do it this way, would be funded by EPA and it would just include work on the southern half of Li Tungsten facility.

COUNCILMAN GONZALEZ: How much would that be?

MR. GARBARINI: I think we were estimating a million and-a-half to two million dollars. From that, the bulk of the funding we will solicit from responsible parties.

COUNCILMAN GONZALEZ: How many

responsible parties are there? I think I know a few of them.

MR. GARVEY: I'm Carl Garvey, one of two of the EPA Region 2 attorneys working on the site, and how much, how many potential responsible parties.

COUNCILMAN GONZALEZ: And the names of the parties.

MR. GARVEY: There are approximately 30 that we have identified to date. We are authorized under the Superfund statute to identify parties who were owners of the site at the time the waste was disposed of, operator of the facilities for which the waste was released, transporters of the waste to the ultimate destination and generators of the hazardous waste. Basically four classes of responsible parties.

We have with exception of the transporters -- which, this site we don't believe there were any at any point -- we have parties, we have former operators, Melting and Refining Corporation of America, which was actually, that was actually prior to the Glen

Cove Development Company's ownership of the Li Tungsten facility they were the owners of record. That's an example of an owner we have identified and notified them as a potential responsible party, the former operator of the facility. We did notify Li Tungsten Corporation, I think we did, although as many people may know it's a defunct corporation through bankruptcy. We notified John Li, the former president, who is now deceased. We notified Teledyne, Inc. a former operator.

Then we move into the realm of generators. I think for the most part the operators of the site are also considered to be generators, and we have also identified I guess at this point 21 or 22, the bulk of the 30 parties are parties who we believe generated the waste at least directly through arrangements they made with Li Tungsten or Li Tungsten predecessor Watchedge Corporations, going back to 1942, the beginning of the facility. They made arrangements for the facility operators to process Li Tungsten or scrap Li Tungsten and a variety of metals,

primarily Li Tungsten oils. We believe the source of the radionuclide waste, but through these arrangements and processing and returning to the suppliers the pure product in that raw material by virtue of those arrangements, we have identified say 22, just slightly rough figures, 22 of those as generators, we call them arrangers, generators and intercepting the statute.

So that kind of gives you an overview of who's out there. We're still looking. I think we'll look to the very bitter end.

I should also mention that we have notified the City of Glen Cove, their liability for at least the Captain's Cove portion of this site by virtue of what we believe to be their operation -- whether direct or indirect operation -- of a landfill, which we believe the city owned part of that or operated part of that during the time that some of this radioactive waste was deposited there. We also notified Nassau County that we believe to be a responsible party as an owner during the same period of the same portions of

the two municipalities, the city and the county. We believe that their liability should be focused just with Captain's Cove.

As you can see, the process that we have gone through a unique formula for the site, but you could calculate the cost of each.

COUNCILMAN GONZALEZ: When would those costs be assessed with in terms of the city's liability; do you have those numbers now?

MR. GARVEY: No. We're really expecting the Superfund sites now to work together to iron the process out.

COUNCILMAN GONZALEZ: Have steps been taken currently to go after the involved parties?

MR. GARVEY: We have been in contact with many of them, we solicited information, comments on the proposed plan. We generally wait to work out an arrangement by which they would participate until after all the settlements were released.

COUNCILMAN GONZALEZ: Thank you.

MS. ECHOLS: Next speaker.

MS. SLATER: Nancy Slater. Can you give

us a realistic time frame of how long it takes for you to collect the money, whatever the process is, I'm not really interested in, I would assume it's like a claim like an insurance claim whatever; what does it take to collect that money and get going on the project; what is the realistic time frame of what you have projected of your $28,000,000-$29,000,000 project, except for the groundwater?

MR. DOYLE: I'll let them let them answer that question.

MR. GARVEY: As far as the timetable, just so you understand, our the approach is for us to after the decision's made and the remedy's selected, we would contact the parties notified, and we would ask them to fund it themselves; that's why how much money -- we have a lot of authority. It wouldn't be come in and volunteer out of the goodness of your heart. We could always sue them later, but, Are you going to do it? If they don't, we have the authority to sue them; so there are incentives there. We would ask them to

come in.

Your question about where the EPA has $28,000,000 sitting in one account waiting to do this work, now, that's not the way we operate. If we were to have to go and get that money to do the work, we could tap into our resources. It's not clear where we need to do that. So, the answer to the question how long would it take to implement the remedy, we're not going to be suing them to get money from them necessarily; we would be asking them to get money to do that, and we would never have to spend money to do that ourselves.

MS. SLATER: But surely there's a time frame for that. You just don't send them a letter and wait until never for them to respond.

MR. GARVEY: Okay. Once the remedy's selected, which would be in a couple months, we send out notice letters saying please come in, and dispatching sets out a four-month period to negotiate with them to determine whether they're willing or unwilling to do the

work.

At the end of that four-month period, you have to sign up or not sign up. If they sign up, we then start the process of cleaning it up from that point forward. If they don't sign up and the government has to make a decision whether we're going to order them to do it, whether we're going to do it ourselves with our own money, if it's available; if we order them to do it and they refuse to do it, we make them go to court to enforce that. So it's not a cut and dry answer. There are enforcement decisions that have to be made.

If the process goes as most Superfund sites tend to go, there will be a four-month period of negotiating, and then if parties sign up to do the work, there would be roughly another two to three-four months to get that settlement finalized in the courts. It has to be entered with a judge. During that period the design of the remedy should start. So the next question is: I don't know how long the design and implement schedule are.

MR. GARBARINI: We think this will be a

relatively simple job aside from getting into the separation of the material.

Typically, if you were to take that aspect of the project and get rid of it, it's really dig and haul, dig and haul. Just go in there start the separation of material.

Now, we want to make sure that we can reduce the volume that is there that is radioactive; so that will take a little bit of effort. So what we will be hoping to do here is to expedite the design and try to move forward. Typically we allow maybe a year to a year and-a-half design. We're not really going to allow that here. In the best of all worlds sometime 2001. Whether that is going to happen or not a lot depends on the responsible parties; sometimes they're going to do work up front say after the settlement is signed up on by all responsible parties. Sometimes responsible parties are willing to start work up ahead of that process. We'll do everything we can to try and expedite that. It's not a short process. We're shooting for 2001. If we phase the

work, as I had mentioned earlier, and deal with the second-half of the Li Tungsten facility using the EPA's trust funds, then we hope to be out there sometime next year, early next year doing the work.

MAYOR SUOZZI: The citizens are trying to make this process happen as quickly as possible. If the parties wind up getting involved in a long drawn-out legal battle, it could take as much as three to five years. You pointed out sort of a rosy projection. Our projective is 2001 is possible, it's unlikely based on the success of other communities. Let me point out there are also some federal agencies that are potentially responsible parties on the site as well.

MR. GARVEY: The mayor is absolutely right. I meant to mention this earlier. There are three federal agencies that are potentially responsible parties. We have identified the General Service Administration, GSA, as a former owner. They actually owned the facility, the land on which the facility was built in '42. We have identified the

Departments of Commerce and the Department of Treasury as two former operators, in particularly their World War II years of the plant in operating of the plant in conjunction of the Li family predecessor. So there are three more parties.

MR. GARBARINI: One more thing of the this first phase that we were talking about. The other key element there is we need to secure funding from our headquarters down in Washington. If we were to do the work and we're in competition with a lot of other sites throughout the country so the agency's policy is to cleanup the worst sites first. So basically what we have to do is go through our Legal Active Prioritization Panel and basically document the problems that the site poses and the reasons why we want to move ahead quickly with this action, basically, and then put that into a pool of all these other sites and battle it out, and try to get some funds. So the funding is not yet secure for that phase of the work, and that's why it's a little tentative.

MR. DOYLE: If that funding is available and we do it while that first phase is being done by us, the process that I talked about will be ongoing so that there will be a sequential, by the time we're done with our phase, we'll hope to have the private parties and the federal parties and the county and the city and whoever else can pick up wherever we leave off, so there won't be a lag.

MS. ECHOLS: Any more questions? Sir.

DR. SPIZER: Good evening, my name is Dr. Roy Spizer. I've been a member of the Li Tungsten Task Force. I've been involved with some of the site for I'd say well over 11 years.

I was originally appointed to the Environmental Advisories Counsel about 12 years ago when we were initially involved in locating these sites.

There are several issues I'd like to address, and I have concerns and questions about regarding certain criteria. The criteria I'm concerned about are one the long-term effect of the permanency remediation

effort. Also I'm concerned about the protection to the human health and the acceptability to the community.

The Li Tungsten site is a toxic legacy that needs to be limited not just reduced. The types of materials that are on this site, radionuclides, uranium, radium and thorium present some very different problems and pose some potential health hazards in the cleanup process.

We've talked about the risk of the site itself having a certain cancer risk, which is not unacceptably high, but in some cases if there is development, it will be unacceptably high. But I think there's a bigger concern about the possible risk to our health in the actual cleanup process.

One of the things about the site that is somewhat unique is there's radioactive uranium on the site, and I got some information from the DEC for the toxic substances and disease remedy. It's a little bit dated, it's 1990, but they state in there that uranium, they talk about uranium to emphasize that human

health affects may result from exposure to it. The Environmental Protection Agency has identified 1,177 sites -- obviously it's more now -- 1,177 sites on its National Priorities List. Uranium has been found low background levels on only 26 of these sites, that's about two percent. Now, the information that they present in here is important because uranium may cause harmful health effects and both of these sites are potential sources of human exposure to uranium.

I would like for us to first address, I read the RI/FS and I have questions and concerns about the decision about the preferred cleanup options. Cleanup options that are preferred, LS 1 and LS 4 versus cleanup options LS 2 and 3 because LS 2 and CS 2 will eliminate all the contamination without separation versus an excavation and separation and disposal of some of the material on-site.

In the RI/FS for Li Tungsten and Captain's Cove's, the EPA's consultant's language clearly makes cleanup options LS 2 and CS 2 better for human health than LS 3 and

4 or CS 3 or 4. In section 4222 under the heading assessment regarding overall protection of human health and the environment it states, quote, Protection of human health and the environment is achieved by removing contaminants, sediments and/or residues above the PRGs for site treatment and disposal. The uncontrolled nature of the contamination from this site will be eliminated by transferring the contaminated media to appropriate disposal facilities. So in this heading, assessment, the EPA's own consultants recommended that there be complete removal of toxic waste from the site. Again, let me repeat that: Removing all the contaminants because of their uncontrolled nature.

There is an omission in the RI/FS, a condition in the disposal of the site was haphazard leaving some measure of unpredictable impact; therefore, the best way to deal with uncontrolled pollution is to eliminate it.

In the RI/FS the consultant's language clearly makes LS 2 better for human health

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than LS 3 or 4. All other criteria were not considered if this one fails. If the EPA doesn't remove all the contamination from the site there will still be some indirect contact with radioactive waste at the site. Simply put: If they do not remove all the radioactive waste, this is not going to be an adequate cleanup.

In section 4232 under the heading long-term effectiveness and permanence, the consultants state that LS 3 and 4 has serious problems because of, quote, existence of contaminant cells in populated areas; however, could possibly result in some compromises to the long-term effectiveness to this alternative. Long-term monitoring of groundwater and surface water would allow assessment of containment systems' long-term efficacy.

There are problems that may arise or are associated with the cell. We question this long-term effectiveness because this may not be a stable method and the contaminants may not remain contained. Furthermore, this

requires continued cost of laboratory testing and consultants, and, if in the future any of these tests fail or if cleanup standards change, the case could be reopened. Therefore, LS 3, according to the RI/FS, is not the best solution.

Furthermore, regarding safety -- protection of our safety and health, there's an absolute need to remove and dispose of all the radioactive waste with the utmost safety precautions and procedures. The Glen Cove community cannot tolerate any migration of radioactive fallout off-site. Migration of radioactive dust or fugitive dust will contaminate the surrounding area of a greater degree that might be inhaled or ingested.

Radioactive uranium, Thorium or radium, do not have -- in the air uranium does not have a maximum allowable concentration level; so the only safe level is absolutely 0, since humans cannot tolerate any exposure.

Uranium and the other radionuclides emit gamma radiation, which is very high energy, in about 10 to 100 times higher than energy than

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x-rays. Like x-rays, these gamma emissions penetrate very effectively.

Beta rays are also emitted by this type of radioactive material, but we think the area can be shielded. However, beta radiation becomes a hazard if the radioactive pattern enters into the body either through inhalation or ingestion. This will bring the radioactive pattern into contact within the tissue of the intestines or lungs. If the radioactivity enters into the intestines, it can be absorbed by the body and the body thinks this metal is like calcium, and deposits them in the bones. This is very dangerous as it puts the radioactive material in the immediate vicinity of the bone marrow, where red and white blood cells are being produced.

The most dangerous route for beta emissions is through the lungs. If radioactive betas are deposited into the lungs, it can cause a great deal of damage to a few cells. The biological effects of this type of radiation to the body, even one exposure, is that it might cause malignant

lung tumors. It can also cause mutations, and, in pregnant women, this type of exposure can cause birth defects or death to the fetus. Inhalation of alpha, beta or gamma emissions certainly increases the risk of lung cancer and other types of cancer. Also exposure to the gamma rays will increase the certain types of cancer.

Therefore what assurances do we have that the safety procedures that the EPA perform, or the responsible parties will perform on the cleanup of the site will protect us from off-site emissions from this radioactive dust?

In conclusion, we cannot place anyone's life in jeopardy for the cleanup of this site. Migration of the radioactivity must not be left to chance, and I strongly urge all the parties, the EPA and the responsibility parties, to place the health and safety of the people of Glen Cove above all other monetary and other considerations, and give the highest priority to safely removing all radioactive material and not cause any fugitive dust to

migrate off-site. This could be accomplished by placing protective structures or barriers around the active cleaning area to prevent any great amount of dust from migrating off-site.

Finally, I urge the EPA to revise the cleanup plan and recommend remedial actions LS 2 and CS 2 as the best cleanup possible.

MR. GARBARINI: That was LS 4 would not be in the cell.

DR. SPIZER: That's still considered an option at this point?

MR. GARBARINI: The remedy we are proposing tonight doesn't have a containment cell.

DR. SPIZER: It changed from the last meeting that LS 3 had a containment cell? There is no containment cell on site?

MR. GARBARINI: That's correct.

DR. SPIZER: The nonradioactive material will be left on site?

MR. GARBARINI: That would also go off-site. You do raise a legitimate concern. It's a fact that we have to deal with at all

our excavation sites. We have done it successfully at our other sites. At Li Tungsten we have special commissions but it's my understanding -- just brief -- that some of the separation technology such as it is, has been used in populated areas, and the work was able to proceed safely

DR. SPIZER: What monitoring has been done on those sites, and have there been any studies on the short-term and long-term impacts of these cleanups in terms of cancer and any other morbidity and mortality?

MR. GARBARINI: I don't think we're prepared to discuss that tonight, and we can certainly respond at the next meeting. Maybe Ed can bring this up with you.

DR. SPIZER: This is one of our concerns. I called the Center for Disease Control and I spoke to the ADSDR and they're not aware of any studies on radioactive cleanup sites as far as safety, radioactive risk assessment, and they have done studies in uranium mines where the miners have mined ore, and, yes, there are impacts also from radon is

an impact. But I don't know if just wetting down the material and shaking it up and the digging up, excavating it and dumping it into a truck. There's a lot of movement, a lot of dust created, you're down on the area near the water. We get very windy up there, so this is a very critical issue that I think you have to give strong consideration to every statement that I made, and again for the reasons I stated, I think LS 2 is the better option.

MR. GARBARINI: We appreciate your comments. We advocate the use of giving consideration of the sites, the direction the wind is coming from, actually putting structures over different units while we're pressing dust over those units. So we do appreciate your comments.

The one thing I do want to mention to you, you talked about and that is a criteria that we call a threshold criteria. We believe that in LS 4 we are achieving that requirement. However, nonetheless I think you make very good points, and we will give them very serious consideration.

DR. SPIZER: One last question from the separation process you're not certain to the exact cost of this. Right now it's estimated my understanding there might be a pilot study first, so in actuality the cost differential may not be as great as is stated in the proposal. If there are problems associated with the separation, it could be higher cost than was estimated.

Cost is one issue, and but when it comes to health and safety cost should take a back seat.

MR. GARBARINI: That is our criteria we have set up, and we believe first and foremost is the protection of human health and safety, the environment and then the next set of five, cost, which is one of them, they're called balancing criteria. They're the weight of trail using those five. Then you have the final modifying criteria, which are community acceptance and state acceptance.

DR. SPIZER: Thank you.

MR. FOSTER: Robert Foster, Campaign for the Environment. I have a question and a

couple of comments. And I question also first a point of clarification.

Although the EPA has named their research alternatives, the other alternatives are still under consideration?

MR. GARBARINI: That's correct.

MR. FOSTER: It's been requested before, but can the public comment period, has it already been extended an additional 30 days?

MR. GARBARINI: We've actually had a request for an extended comment period, and we actually had set up a date of September 17th, which is an additional three weeks. We hope that that will be satisfactory.

MR. FOSTER: The soil cleanup remedy talks mainly about radiological and metal contamination, but it's mentioned in the remedial investigation of the soils of the Li Tungsten site, that semi-volatile inorganic compounds were found dangerous standards in at least one location; so I'm not sure how those are being addressed in the cleanup plan, and I would request that the semi-volatiles inorganics would be addressed as part of the

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cleanup plan.

MR. GARBARINI: When you use the term standards there, there really aren't standards that we use for soils. What we do look at is the risks that the contaminants in the soils pose to future people using the site. We also look across from contamination of the soil to the contamination of the groundwater.

MR. FOSTER: How are the semi-volatiles being addressed?

MR. GARBARINI: We did have, should have on parcel A that you're talking those higher levels are pretty much operations on the site that occurred during the turn of the century when they were doing a lot of coal and given the fact that that activity did take place, we frequently find these sorts of contaminants associated with coal and even barbecue pits, and the future land use for that site was commercial-industrial, the agency went back to its alternative risk numbers for that future use of the site, and that's how we looked at the PE contaminations.

MR. FOSTER: I guess then I have a

comment which is to make it a concern and remediate at least the highest parts of the semi-volatile organic compounds.

As far as the preferred remedy goes, I agree especially with the previous speaker CS 2 and LS 2 and LS 4 and CS 4. It's our understanding that there will be a separation of the radiological from the nonradiological and that separation technique will constitute radiological components in one pile -- so to speak -- and the lesser radiological components in another pile, but there still will be some relatively less nonradioactive pile; that pile will then be separated into nonmetal contaminated and metal contaminated, once again, that separation technique is not perfect, and the noncontaminated part will have some metal contamination associated with it.

By removing all the off-site you not only reduce the total amount of metal on site, but also the total amount of radiological contamination on-site; so we would research that alternative as far as meeting the

threshold of protection of human health, the LS 4 meets the threshold of protection of human health. As the previous commentator stated, LS 2 and CS 2 surpass LS 4 and CS 4 in their protection of human health, even though LS 4 and CS 4 meet it. I would also state a preference for LS 2 and CS 2 for soil remediation strategy.

MR. MACERONE: John Macerone, City of Glen Cove. One of the things that's been discussed is that the potential for the property will be commercial redevelopment and not residential, and you mentioned some standards. The federal government sets those standards. Have there been any other sites in the United States in this 1,500 or so sites that there are where similar contamination has existed and these thresholds have been met? I want to get a feeling as to where and to how these thresholds come up with and what the difference between a cleanup from a commercial standpoint all the way down to a residential standpoint; is it significant difference?

MR. GARBARINI: It really depends on the

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specific contaminants.

MR. MACERONE: Which contaminants?

MR. GARBARINI: If you're talking about the radiological contamination, there really would not be that much of a difference, I don't believe, between the commercial cleanup and the residential cleanup numbers.

MR. ALS: Not dramatically.

MR. MACERONE: Not a dramatic?

MR. ALS: You can't go much lower.

MR. MACERONE: Then why wouldn't we clean it up to say a pristine point; it cost a lot more money if the threshold --

MR. GARBARINI: -- I think the discussion was pretty much related to a different type of contaminant.

MR. MACERONE: I understand that.

MR. GARBARINI: In that instance, yes, we would have to do a decent amount of more cleanup on that parcel.

MR. MACERONE: From a financial standpoint, how much money?

MR. GARBARINI: I'm not sure if we could respond to that. I think we --

MR. ALS: -- I'm asking our consultants if they know off the top of their heads rough guess on parcel A dimensions.

MR. GARBARINI: If you don't know we can respond to that later.

MR. MCGRATH: I don't know off the top of my head.

MR. MACERONE: The reason I ask is, when I look at the proposal for the groundwater, one of the things that is a reoccurring theme is meeting the threshold for human health and the proposed solution is LW 1, which is no action. It's my understanding from doing a little research that the goal of that is the groundwater is contaminated because of the soil that exists on the site and hopefully if we remove that, the groundwater will be eventually cleaned up.

MR. GARBARINI: Right. Because of the localization of the contamination.

MR. MACERONE: But from the cost effectiveness standpoint, when I look at the possibilities, we're talking about $722,000 for LW 1. When you look at LW 3 and LW 4,

you're talking about 1.2 million dollars, $500,000 out of a $29,000,000 project, a difference of $500,000. But there's a significant difference between -- at least from reading this proposed plan -- from a health standpoint, when you look at LW 1, the bottom line is that because this alternative would result in contaminants remaining on-site above health-based levels, it would require the site to be reviewed every five years. So what this tells me is that you could do all your work and let's assume the best case scenario, we begin in 2001, and I look at these solutions to be on soil contaminants, it's seven to nine month project, you mention that they design it pretty fast, we could be done in 2003, possibly starting development in 2002, 2003, but from reading this it tells me that there's a possibility that the groundwater in 2003 or 2004 still could be contaminated above what the EPA considers a health risk. So my request to you would be if for $500,000 more it seems the only difference between LW 2 and LW 3, is that LW 2 you're

going to be actually cleaning the water on the site, where with LW 3 you would already take that to another Superfund site very close to where we're talking about, Mattiace. It would only be $500,000 more.

In a $29,000,000 project, I would want if we're spending that much money, and obviously the city's going to be involved, and the federal government's going to be involved, let the EPA consider that $500,000 doesn't seem like a lot and five years from now, again, I don't know, I don't think anyone up here or even your consultants can tell me for certain that in five years that water will be cleaned up below the standards. So it seems to me if we're going to do it, we should do it now, so that in five years from now we don't have that problem. And is the EPA considering that?

MR. GARBARINI: We will certainly consider it. We have considered it. I think part of the thinking is, with this alternative is that we would continue to monitor, and if our estimates that the significant removal,

cleaning the soils for very low levels for the inorganics, and these are the contaminants that are showing up in the soil by going down, taking the extra effort to achieve a low soil, the groundwater could cleanup pretty quickly. Like you said, it does not cost so much more and especially with inorganics you go in and remove the source, the groundwater does clean itself up pretty quickly given that this is a localized hot-spot situation.

MR. MACERONE: Let me ask you this then with regard to the implementation of the plan: Would financially it be easier if both plans were done simultaneously as opposed to say we come back five years from now and the groundwater isn't cleaned-up to what you say health-levels, would this 1.2 million dollars be significantly more because all the other work has been done, the soil's been replaced, the buildings knocked down?

MR. GARBARINI: Yeah. With inflation, it would be probably a little more costly. The other thing that we do at other sites which we might want to add language here to make it a

little more forceful as a contingency remedy if we do not find the groundwater is cleaning itself up, perhaps kick in a contingency which could be one of these other alternatives. Bring your comments back to the office and give them some consideration. You talk about $700,000, that's someone's money so we have to give it some thought.

MR. MACERONE: It is $700,000, but in the scheme of things it's actually $500,000 out of $29,000,000. When you look at this proposal, it's $500,000 and out of the four proposals, one is no action and the other two talk about that specific proposal, and you mention this building and these sites have been closed since '84. The fact that they have been closed and the fact that Mr. Als mentioned and this I happened to be on the city counsel when this became a Superfund site, and that's been 12 years, and that property has not brought much money to the City of Glen Cove and its citizens; in fact, it's cost them a lot of money. So, I want to make sure that if you're going to do it and

spend $29,000,000, you're going to do it right. You're right, $500,000 is a lot of money, but when it's 30 people and its the Federal Government, the City of Glen Cove, the County of Nassau, the State of New York, if you're going to do it, I would hope that you were going to do it the right way. Maybe $500,000 seems a lot to you, but it's cost the city a lot more than $500,000 over the last 15 years, and if we don't do it right, it's going to cost our taxpayers a lot more in costs and possibly in health risks.

MR. GARBARINI: That's part of the dialogue of coming out to speak to you. We'll certainly consider your comments.

MR. WARNER: Len Warner. There are State of New York DEC guidelines for semi-volatile, and we calculated an additional 8,350 cubic yards to be excavated in parcel A if it was chosen to meet those guidelines and the cost that we estimated for excavation and disposal of the 8,350 yards was about $4,500,000.

MR. MACERONE: So close to $4,500,000 to

cleanup to a pristine piece of property, to meet residential standards?

MR. WARNER: I don't know if they really describe them as residential guidelines. They're cleanup guidelines that they have developed and they work in certain situations where they are appropriate to use them.

In the case of the semi-volatile contamination of the EPA's risk assessment -- (Audience interruption) -- I was just making a note and on parcel A there are some semi-volatile contaminants and one of the things we looked at in doing the feasibility studies when we looked at the guideline for semi-volatiles, we came up with a number of about 8,350 cubic yards of semi-volatile contaminated soil, if you were strictly following the state guidelines. I think it's important to note that the EPA's risk assessment indicated that even though the semi-volatiles were present in the state guidelines, they did not feel that they would pose a risk to future industrial workers on parcel A.

So, in this case, I don't think it's necessarily appropriate to say that the DEC guidelines or residential standards or nonresidential standards, they're a set of guidelines that were developed, and there's so many different standards and usages, I think it's important not to get confused or mischaracterized.

The cost that we estimated for disposing of that material if it was chosen, was about $4,500,000 extra.

MR. BALLVE: I just wants to introduce myself, my name is Marcello Ballve. I'm a Newsday reporter. I don't usually cover this area, but I will be writing a story, and I wanted to give out my phone number in case anybody here wanted to contact me, and, you know, express any concern or anything. The phone number's 843-2700, and you can just ask for me and I'll be there.

I did have one question for the panel, and I know this might be outside of what you guys had to look at since it was probably radioactive waste or whatever that you were

mainly concerned about, but I did notice from the map you know there's a creek running right through the area, and I'm not sure what the difference between a waterway and what the groundwater may be, and I was wondering what the creek or the creekbed or the waterway itself played any role in sort of your formulation of the plan for cleanup or not?

MR. ALS: Actually, the Glen Cove Creek there is hydraulically connected to groundwater that we're talking about. We actually started monitoring the program as a result of the Mattiace study that we did in the earlier part of this decade. We studied the creek and decided that just future monitoring to see how the profile of the creek changes because of the amounts of the contaminants we thought were still going in there. We didn't think it was advisable to try to clean it up at that point.

Subsequently there's been a lot of activity, I don't know if anybody from the city wants to elaborate, but the creek has been dredged partially two years ago, a year

and-a-half ago, and I understand that there will be additional dredging work going to be done there to complete the Mattiace in the fall or early spring of next year, and that sort of thing, you know, really changes the profile that you have in sediments there too.

MAYOR SUOZZI: Let me point out that the city has done sampling of the creek with different monies it received from different agencies, including the Department of Environmental Conservation, the Army Corp of Engineers, and the Bureau of Fish and Wildlife, the public health officer was involved and some other groups, secretary of state's office and one of the things that we found was the sampling there's no radioactivity in the Glen Cove Creek, but there are elevated levels in the creek sediments which is stuff related to oil-based products; then there's also modest levels of copper as well, but for the most part, we're very happy to find out there was no radioactivity.

MR. ALS: In our latest finding this

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past summer, there was a pretty dramatic decrease in various contaminants in the area that was dredged a year and-a-half ago compared to prior monitoring that we did. So the dredging, not that that was its purpose, but the dredging actually lowered the contaminant profile at least towards the Hempstead Harbor portion of the creek.

MS. ECHOLS: Sir, in the back.

MAYOR SUOZZI: Let me also point out that the friend of mine caught a 20-pound bluefish recently in that creek -- nobody will eat it.

MR. HAUCK: Since we're going to be competing for funds from the federal government, from the EPA, what is the current rating of that site on the National Priorities List?

MR. GARBARINI: When you go through the ranking process for the National Priorities List using the hazard ranking system, you basically need to score above a predetermined value and that really is just assessing the relative threats that you think the site might

pose.

We're at the point now in the process where a lot of the information about the site, that prioritization panel that I talked about generally has a meeting of the latter part of October every year, and then we had subsequent conference calls to go back over the sites, but the first big meeting would be in October of this year, and now sometime before the end of October we would be submitting the information to them, and then they would go out to the other sites that are at the same point in the process to be funded and see how they would compare to those other sites.

MR. HAUCK: How have we done in the past?

MR. GARBARINI: In terms of where does Li Tungsten come in? This is just a remedial action. It's a specific category, so we haven't actually gone down there for the money yet.

As I mentioned earlier, when we talked about the removal action, we were able to secure more than $6,000,000 of trust fund

monies in the removal action, and the Region 2 has been very successful, historically.

MS. LOUGHLIN: My name's Patricia Loughlin. I'm part of the Li Tungsten Task Force. I'm also a resident on Janet Lane, which is on the north part of the area across the creek.

I came tonight for two questions: One, I have a brother-in-law who worked for Li Tungsten for 10 and-a-half years. His health is not very well right now. I also attended four funerals of four gentleman who worked there, all who died of cancer. I had a son who was one of those adolescents who trespassed. He was one of 25 or 30 boys in our neighborhood. They played in the woods because we had no playgrounds. They played war, all kinds of games. They came in contact with the wildlife. They brought home frogs, snakes, things like that.

My question is, the last cancer cluster in Glen Cove, I believe the EPA did a cancer assessment; what are those who are responsible done for the residents in the area or the

trespasser in the area, or the men who worked for Li Tungsten and is the Department of Health going to be brought in to do an assessment?

MR. GARBARINI: In terms of what efforts are being done or can make for residents in that area or the former workers?

MS. LOUGHLIN: I understand it was supposed to be some kind of medical survey done in Suffolk County, but it was squelched for the men out in Li Tungsten.

MR. GARBARINI: We can take a look at that and we can talk to the county health department.

MS. LOUGHLIN: I called the county health department and the Department of Health at the state, and I have yet to get a return call; so I expect to get something soon, and I'd like to know if the Mayor will take part in trying to get the Department of Health in here.

We had eight cases of cancer on our street alone, 62 cases in a five-block area, and that was by word of mouth. I also belong

to my tenant's association.

MAYOR SUOZZI: We have a volunteer group in Glen Cove that's called Glen Cove Cares, that is working on trying to raise money to do that now. We're working also with the Department of Health, Bureau of Chronic Disease and this is Bill Gillsey.

MR. GILLSEY: I'm with the New York State Department of Health. They do those sorts of surveys and a Glen Cove cancer incidence study was done, I believe, in 1990. It looked at records all the way up to that time and through that time.

My recollection is that the results were what we would find in many communities. The types of cancers, different sites of cancer, lung cancer prostate cancer, breast cancer, that most of them were what we used to find in communities of this size. There were a few types of cancer slightly elevated, other cancer deficit.

That study, if I talk to you afterwards, I'll get your name and number and we'll get back to you specifically on that to see if

there's a need to update that based on recent information or anything that's happened in the last 10 years. As far as the Li Tungsten site, I'll talk with our -- we have a group that deals with some of the occupational -- I'll see, I don't know offhand if Li Tungsten has been monitored for the workers and employees there.

MS. LOUGHLIN: I would say yes. But I would like to know for my son's health, young men who live in my neighborhood who are now in their 30's or having children and are in their 30's.

MR. GILLSEY: That's something that DOH would consider. I'm not sure how many questions for cancer surveys come, but I do know that if the historic one had been completed, we can talk afterwards.

MS. LOUGHLIN: When that study was done in 1990, was that done throughout the city?

MR. GILLSEY: Department of Health again. I suspect, I don't know but I can find that out, I suspect it was done by whatever zip codes Glen Cove used.

MS. LOUGHLIN: We only have one zip code.

MR. GILLSEY: It will probably match your zip code and/or your census track, but actually, I can get back to you with the exact information.

MS. WECH: Brenda Wech. The time frame of that study?

MR. GILLSEY: I don't know how long it took them to complete the study, but I suspect they went back all the way to the '40's maybe, is when they yeah, I think it was the 1940's in New York State established this cancer registry.

MS. LOVELAND: My name is Kailin Loveland. In regard to alternatives LS 2 and CS 2 and LS 4 and CS 4, it appears from the reading of that document that alternative 2 is more expensive, yet alternative 4 is more time consuming, and alternative 4 is also some higher risk because there's more handling of the waste materials. If alternative 2 had been cheaper, would that have been the preferred alternative?

MR. GARBARINI: I would say from my perspective, yes.

MS. LOVELAND: Is there a way that the data --

MR. GARBARINI: -- Actually, there's another thing that we need to consider when we do all this too is disposal capacity, but seriously, that's one of the things that we consider. But if there were ability to handle this waste and it was cheaper, sure it would be the preferred alternative from my perspective.

MS. LOVELAND: Could the data that you used to look at and process this be made available in time to be looked at and then commented on before the September 17th deadline?

MR. ALS: Yes. It's in the FS, feasibility study.

MS. LOVELAND: Thanks.

MS. ECHOLS: Ma'am.

MS. JENSEN: Jill Jensen. In the proposed plan on the first page it mentions that you need to decommission some industrial

wells, who are these wells supplying water to up until now?

MR. ALS: It's a defunct industrial well. It used to be used at Li Tungsten for industrial purposes that they had there, fire suppression, and I guess process and stuff like that. It's defunct, but it's a potential conduit into the deeper Lloyd Aquifer, and for that reason we think it should be plugged.

MS. JENSEN: Another question: In the summary of noncancer hazards you mentioned current off-site residents is also unacceptable; what's the distance of that risk in nonresidents?

MS. OLSEN: In doing the risk assessment what that looked at is if wind was blown off-the site into the surrounding community. In doing that we basically looked at if there was no ground cover present, how much material would go off and how many people would be exposed. We used a model to actually look at the concentrations of materials blown off-site. Again, if you look at the site itself right now, there is considerable ground

cover there to prevent that from occurring. That was how we did the assessment.

MS. JENSEN: But I still I don't -- what is the distance that you are over-estimating as being a risk off-site?

MS. OLSEN: Are you asking what the off-site risk is?

MS. JENSEN: Yes.

AUDIENCE MEMBER: Are you assuming that the residents are right off the boundary of the property?

MS. OLSEN: Yes.

AUDIENCE MEMBER: What were the specific risks and the contingent responsible for it?

MS. OLSEN: The main contaminant we were concerned about is the cancer risk that Ed talked about, but for noncancer we had expedients based on negatives, and again, we have a procedure for evaluating it using information from animal studies, and we applied factors to be even more protective for you, and we did have an exceedence from the hazard index that Ed talked about.

MR. GULCRANT: My name is Tom

Gulcrant. I have a couple of questions, perhaps the first one for Dr. Olsen about the risk assessment process. It was difficult in reading the reports to address some of the specifications that occur in some of the inorganic contaminant pathways. Is it possible for us to have further revelational write-up of some of those details in the response of that document, it speaks about arsenic, for example, as arsenic and planning for how to fix the problem.

MS. OLSEN: In toxicity it's usually the chemicals that we look for in specificity, we just used generic arsenic.

MAYOR SUOZZI: Just a question.

MS. OLSEN: We can provide for more detail in our toxicity side. We have a generic value for arsenic.

MAYOR SUOZZI: One of the starting premise that you mentioned that was that a lot of the contaminants were collocated; is it your sense that during the design and actual remediations that if you zoomed in on some, do you really feel like these are in pools

together and you'll be able to sweep in with some sort of truck-lingo to get it back out; do you think there's going to be a more tactical level removal or --

MR. GARBARINI: Generally during design, we will conduct some additional sampling to further define cut lines and depending on the weight of information we have, our guess from what the R data is and maybe a couple pockets here and there.

AUDIENCE MEMBER: Towards that end of actually planning for material to be moved, excavated, at that point you're starting to spend money, will you be making those decisions when the deal is brought together? It's tough to tell whether this is the way things are supposed to work or not, you have some remedies in mind with some straight cost estimates. Is it usual that the PRPs find out about this and sign on not so usual? Is liability dependent upon knowing who's coming to the table, who's signed on, and how much of the cost they're going to possibly have to pay?

MR. DOYLE: I may not be entirely clear on what you're asking, but the parties that were identified were asked both before and after the subsequent removal actions. They were asked if they wanted to do it, so to the extent that they were to be involved in the process prior to this, in many sites they are because they came in early on to do RI/FS. At the same time it's not uncommon for us to go to the RI/FS, while the RI/FS is ongoing they're going to be asked to do the work as described in the decision. So if it turns out the cut lines are moved to the left or right, they will be on the hook to do that to our satisfaction.

AUDIENCE MEMBER: Earlier it seemed like you were still identifying the people and you hadn't been able to testify, that they were still being sought out.

MR. DOYLE: That's a misunderstanding on our part. I should emphasize we have identified PRPs is an anacronym for Potentially Responsible Parties. That doesn't mean that a party can't come in and show us

evidence that beyond any question his name shouldn't be on the list, but at this time it's we've got about 30 parties that we told them we think they're on the list, and we're going to ask them to do work, and there may be more. I think 130 some-odd customers, former customers, and as we're evaluating the responses, the list, it's possible it will go up a little bit, it's possible it will go down a little bit, and it's possible that the number will pretty much --

AUDIENCE MEMBER: Last question, simple one: Is it typical that you would present the cost as a number like that $29,742,000 or is it possible that we could ask that you present the range, such as an assumption of 50 percent line reduction, means that that number is based on some guess; is it typical that that's the way the numbers present, at least $29,000,000 conservative or perhaps ranging to some other number?

MR. GARBARINI: We generally will come up with a number and discuss what the assumptions were that went into generating

that number. In other instances we may talk about what sort of range, but inherent in any of our estimates, this is a rough estimate when we get through our remedial design, we'll have something better in mind. Right now we're talking about plus 30, minus 50, plus 25, minus 50 is the estimate.

MAYOR SUOZZI: I want to make a suggestion based on what Mr. Garbarini just said. The city is doing the state-related cleanup at Captain's Cove. When we were designing the remedy for that site, it couldn't be this amount of weight up to that amount of weight. We were guessing about how much waste was there and the number would bring in somewhere from $3,000,000 to $6,000,000, and we said let's spend $25,000 now and dig big holes and find out what's there a little better. I'm going to make a suggestion that either the EPA spend a modest amount of money now to get a better idea before they cleanup the site, or the PRPs get some preliminary estimates before they come in wholehearted try to solve this problem and

make a modest investment of less than $100,000 to find out exactly how much waste is there by actually digging holes. Just to suggest that we did plenty of core sample cells, get a lot of information for the core samples, but we actually went out and dug big holes.

MR. GARBARINI: That's not a bad idea. I think that could certainly be predesigned before all is said and done. Lots of times what we try and do during the RI/FS is get through it so we can actually get out there -- especially with a dig and haul -- you really get out there and move the earth around, and that's when you really figure out.

MAYOR SUOZZI: One of the things is the PRP if it's your responsibility at all you can get a better idea of what it's going to be, you actually dig a hole around them and find out and it's not guessing.

MR. GARBARINI: Okay.

MR. GARVEY: I'm going to add something to that comment but also I think with PRP participation in the cleanup and typically they can find cheaper ways of doing different

things, and certainly it's in their interest to try and do that given it's got to be with our concurrence, and I think you do see the numbers adjusted once the PRPs are focused and they are somewhat designing the remedial actions. It's a starting point. It's a baseline number, I think, if nothing else.

I wanted to make sure that the attendees of this meeting knew that just to emphasize it that EPA has to date spent approximately $10,000,000 at this site. I think we have touched on those costs to some degree if the folks out there have asked us in a variety of ways what our share is here, or what our funding level would be here, but to date to get to this point, we have spent about $3,500,000 in performing the remedial investigation and feasibility study, and as Jim Doyle pointed out a few minutes ago, the offer was made at least to the initial parties that we had identified in the early '90s for them to do that work. They declined. We spent Superfund money to get that work done. A similar offer was made to perform the

removal action which was completed last October. That was an EPA lead because the PRPs that had been identified to that point had declined to perform it. That cost about $6,500,000, on top that that would be the $29,000,000 remedy that we have been discussing here tonight.

MS. ECHOLS: Sir.

MR. NEERY: Dave Neery, Glen Cove. So what you're saying is that $10,000,000 plus the remedy, are you going after the PRPs for the $10,000,000 already spent?

MR. DOYLE: Yep. If it's possible and conceivable, then we'll -- in cases across the country we sometimes split the baby and say we'll sue you now for the work, and sue you later for the cost. There's various policies that we have where you can come in and actually do the work and get money off our pass-off the cost bills; so there are inducements to get parties to come in.

MR. NEERY: So when you get them around the table they're really talking about an estimate of about $40,000,000 in total?

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MR. DOYLE: Yes, that's right.

MS. ECHOLS: Any more questions?

MAYOR SUOZZI: I want to make one last comment. I know a lot of people have volunteered over the last several years on the Li Tungsten Task Force as well as any other people that are part of the Li Tungsten Task project, and I'd like everybody to get these volunteers a round of applause for the work that they have done. (Applause.)

I also want to thank all the different professionals that have worked on this process for years as well, the EPA, Department of Health, and all the consultants that have been involved -- who also get paid a lot of money -- but I feel very grateful to a lot of people who are very serious in this community.

Also, I'm just making an appeal to the PRPs that have their representatives here tonight, and I know that they're here but are not making themselves known, I'm appealing to them in general that we want to try and get this thing cleaned up quickly and effectively and safely for our residents as soon as

possible. And I think you have heard from the people that are here both from the public, as well as the professionals that are here, as well as the government officials that have spoken, that we're reasonable people, that we want to do this right, and we want to do this quickly. So to the PRPs that are here tonight -- and I know there are a lot of you here -- and I can't tell you who I represent, but I'm here representing a PRP -- but we want to appeal to a few of you to try and make this thing happen, and not to wait another five years of this while we're just sitting there, and affecting our residents' conditions, and we ask you to please come up to the table. We are reasonable. Thank you very much.

MS. ECHOLS: Mayor Suozzi, we would like to thank you for all your generous comments tonight, and your ability to get all of this worked out and wanting to get your community cleaned up. Thank you very much.

I just want to mention again that the comment period ends September 17th, and if you have e-mail access, our internet address is on

the second page and/or you can call me at 800-346-5009. Thank you again.

(Time ended: Said 9:40 p.m.)

CERTIFICATION

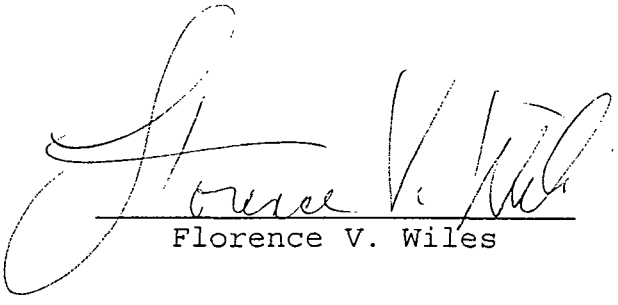
I, Florence V. Wiles, Notary Public for the State of New York, do hereby certify:

THAT the within transcript is a true record of the testimony given.

I further certify that I am not related by blood or marriage, to any of the parties to this action; and

THAT I am in no way interested in the outcome of this matter.

IN WITNESS WHEREOF, I have hereunto set my hand this 16th day of August, 1999.



Florence V. Wiles

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Sworn to before me this

_____ day of _____, 19____

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